AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A method for producing a honeycomb catalyst having gas conduits for feeding a gas to be treated from an inlet to an outlet of each conduit and performing gas treatment on the sidewalls of the conduit,

characterized in that the honeycomb catalyst has an approximate length such that the flow of the gas to be treated which has been fed into the gas conduits is straightened in the vicinity of the outlet, and that the length (Lb) is specified by $Lb = a \cdot Lt$ (wherein "a" is a constant, and Lt is a sustained turbulent flow distance, which is the distance from the inlet to a site where turbulent flow energy is lost in the course of transition from turbulent flow to laminar flow).

2. (previously presented): A method for producing a honeycomb catalyst according to claim 1, wherein the length Lb (mm) is represented by equation (A):

$$Lb = a(Ly/Lys \cdot 22e^{0.035(Ly \cdot Uin)}) \qquad (A)$$

(wherein Uin (m/s) represents a gas inflow rate, Ly (mm) represents an aperture size, Lys is an aperture size of 6 mm (constant value), and "a" is a constant falling within a range of 3 to 6, when the aperture size (Ly) is 6 mm and the gas inflow rate is 6 m/s).

3. (previously presented): A method for producing an NO_x removal catalyst for use in an NO_x removal apparatus, which is a honeycomb catalyst for use in a flue gas NO_x removal

apparatus, the catalyst having gas conduits for feeding an exhaust gas from an inlet to an outlet of each conduit and performing NO_x removal on the sidewalls of the conduit,

characterized in that the NO_x removal catalyst has an approximate length such that the flow of the gas to be treated which has been fed into the gas conduits is straightened in the vicinity of the outlet, and that the length (Lb) is specified by Lb = a·Lt (wherein "a" is a constant, and Lt is a sustained turbulent flow distance, which is the distance from the inlet to a site where turbulent flow energy is lost in the course of transition from turbulent flow to laminar flow).

4. (previously presented): A method for producing an NO_x removal catalyst for use in an NO_x removal apparatus according to claim 3, wherein the length Lb (mm) is represented by equation (A):

$$Lb = a(Ly/Lys \cdot 22e^{0.035(Ly \cdot Uin)}) \qquad (A)$$

(wherein Uin (m/s) represents a gas inflow rate, Ly (mm) represents an aperture size, Lys is an aperture size of 6 mm (constant value), and "a" is a constant falling within a range of 3 to 6, when the aperture size (Ly) is 6 mm and the gas inflow rate is 6 m/s).

5. (previously presented): A method for producing an NO_x removal catalyst for use in an NO_x removal apparatus according to claim 3, wherein the length of the NO_x removal catalyst falls within a range of 300 mm to 450 mm.

6. (previously presented): A method for producing a flue gas NO_x removal apparatus comprising a plurality of NO_x removal catalyst layers provided in the gas flow direction, each

catalyst layer being composed of a plurality of honeycomb NO_x removal catalysts juxtaposed in a direction crossing the gas flow direction,

each honeycomb NO_x removal catalyst having gas conduits for feeding an exhaust gas from an inlet to an outlet of each conduit and performing NO_x removal on the sidewalls of the conduit,

characterized in that each of the NO_x removal catalysts forming each NO_x removal catalyst layer has an approximate length such that the flow of the exhaust gas which has been fed into the gas conduits is straightened in the vicinity of the outlet, that the length (Lb) is specified by Lb = a·Lt (wherein "a" is a constant, and Lt is a sustained turbulent flow distance, which is the distance from the inlet to a site where turbulent flow energy is lost in the course of transition from turbulent flow to laminar flow), and that two NO_x removal catalyst layers adjacent to each other are disposed with a space therebetween, the space serving as a common gas conduit where exhaust gas flows discharged through the NO_x removal catalysts are intermingled one another.

7. (previously presented): A method for producing a flue gas NO_x removal apparatus according to claim 6, wherein the length Lb (mm) is represented by equation (A):

$$Lb = a(Ly/Lys \cdot 22e^{0.035(Ly \cdot Uin)}) \qquad (A)$$

(wherein Uin (m/s) represents a gas inflow rate, Ly (mm) represents an aperture size, Lys is an aperture size of 6 mm (constant value), and "a" is a constant falling within a range of 3 to 6, when the aperture size (Ly) is 6 mm and the gas inflow rate is 6 m/s).

8. (previously presented): A method for producing a flue gas NO_x removal apparatus according to claim 6, wherein the length of the NO_x removal catalyst falls within a range of 300 mm to 450 mm.

9. (currently amended): A method for producing a flue gas NO_x removal apparatus according to claim 7,~~claim 7 or 8,~~ wherein 3 to 5 stages of the NO_x removal catalyst layers each having a specific length (Lb) are provided.

10. (new): A method for producing a flue gas NO_x removal apparatus according to claim 8, wherein 3 to 5 stages of the NO_x removal catalyst layers each having a specific length (Lb) are provided.